

3M Center
St. Paul, Minnesota 55144-1000
612/733 1110

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET



DIVISION: ADHESIVES, COATINGS AND SEALERS

TRADE NAME:

SHIPPING NAME: (TM) Box Re-Nu Coating

3M I.D. NUMBER: 62-4602-4930-3

Industrial Hygiene

JAN 3 1990

ISSUED: MARCH 3, 1989
SUPERSEDES: JUNE 30, 1987
DOCUMENT: 10-3165-7

1. INGREDIENT	C.A.S. NO.	PERCENT	EXPOSURE		LIMITS	
			VALUE	UNIT	TYPE	AUTH
acetone	67-64-1	30.0 - 40.0	750	ppm	TWA	ACGIH
isobutane propellant	75-28-5	10.0 - 20.0	NONE	NONE	NONE	NONE
propane	74-98-6	1.0 - 10.0	1000	ppm	TWA	OSHA
ethyl alcohol	64-17-5	1.0 - 10.0	1000	ppm	TWA	ACGIH
2-ethoxyethyl alcohol	110-80-5	1.0 - 10.0	5	ppm	TWA	ACGIH
xylene	1330-20-7	1.0 - 10.0	100	ppm	TWA	ACGIH
toluene	108-88-3	1.0 - 10.0	100	ppm	TWA	ACGIH
n-butyl alcohol	71-36-3	1.0 - 10.0	50	ppm	CEIL	ACGIH
isopropyl alcohol	67-63-0	1.0 - 10.0	400	ppm	TWA	ACGIH
n-butyl acetate	123-86-4	1.0 - 10.0	150	ppm	TWA	ACGIH
methanol	67-56-1	1.0 - 10.0	200	ppm	TWA	ACGIH
bis-2-ethylhexyl phthalate	117-81-7	1.0 - 10.0	5	mg/m ³	TWA	ACGIH
nitrocellulose/alkyd base	None	20.0 - 30.0	NONE	NONE	NONE	NONE

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

2. PHYSICAL DATA

BOILING POINT:..... Compressed gas
VAPOR PRESSURE:..... Compressed gas
VAPOR DENSITY: > 2.00 Air = 1
EVAPORATION RATE:..... > 2.00 Ether = 1
SOLUBILITY IN WATER: Very slight
SP. GRAVITY:..... N/A
PERCENT VOLATILE: 77.00 %
VOLATILE ORGANICS: 608.00 gm/l
pH: N/A
VISCOSITY: N/A
APPEARANCE AND ODOR: Tan, thin liquid

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... -50.00 F
FLAMMABLE LIMITS - LEL: 1.00 %
FLAMMABLE LIMITS - UEL: 19.00 %
AUTOIGNITION TEMPERATURE: ... N/D
EXTINGUISHING MEDIA:
CO₂, foam, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES:
Fire fighters should be equipped with self-contained breathing apparatus when fighting fires involving this material.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Extremely Flammable. (Treat as flammable pressurized container).
Overheated, closed container adjacent to fire could explode due to

Abbreviations: N/D - Not Determined N/A - Not Applicable

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET

3M

MSDS: SHIPPING MATE (TM) Box Re-Nu Coating
MARCH 3, 1989

PAGE: 2 of 5

3. FIRE AND EXPLOSION HAZARD DATA (continued)

pressure buildup.
NFPA-HAZARD-CODES: HEALTH 2 FIRE 4 REACTIVITY 0
UNUSUAL REACTION HAZARD: None

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
N/A CONDITIONS TO AVOID: Do not store at temperatures above 120F.
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
CO, CO2 and smoke particles when subjected to excessive heat or flame.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

If cans rupture: Extinguish all ignition sources. Ventilate the area. Observe the precautions from other sections. Contain the spill. Cover with absorbent materials as needed. Collect spilled material. Place in a U.S. Department of Transportation - approved metal container, and seal.

RECOMMENDED DISPOSAL:

Incinerate absorbed and partially full cans after mixing with flammable material in a licensed hazardous waste facility. The facility must be capable of handling aerosol cans. Do not puncture or burn cans in a household incinerator. Dispose of empty cans in a sanitary landfill. Disposal should be in accordance with applicable regulations. U.S. EPA Hazardous Waste No.: D001 (Ignitable).

ENVIRONMENTAL DATA:

Volatile Organic Compound (VOC):
Maximum VOC = 608 grams/liter.
Maximum VOC minus Water minus Exempt Solvents = 608 grams/liter.

SARA HAZARD CLASS:

FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

6. SUGGESTED FIRST AID

EYE CONTACT:

In case of eye contact, immediately flush eyes with plenty of water for at least 10 minutes. Call a physician.

SKIN CONTACT:

Wash with soap and water.

INHALATION:

If inhaled remove to uncontaminated air. Call a physician.

IF SWALLOWED:

If swallowed, do not induce vomiting. Call a physician or poison

Abbreviations: N/D - Not Determined N/A - Not Applicable

3M Center
St. Paul, Minnesota 55144-1000
612/733 1110

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET**3M**MSDS: SHIPPING MATE (TM) Box Re-Nu Coating
MARCH 3, 1989

PAGE: 3 of 5

6. SUGGESTED FIRST AID (continued)

control center immediately.

OTHER FIRST AID:
NONE**7. PRECAUTIONARY INFORMATION**

Keep product and its vapors away from heat, sparks, flames, and all other sources of ignition. The vapors released by the product can be ignited easily and burn explosively. Extinguish and do not ignite any flame in the immediate work area. Avoid prolonged breathing of vapor and overspray (airborne adhesive particles). Use only in areas with sufficient ventilation to maintain vapor and mist exposures below recommended exposure limits. Local exhaust ventilation should be used if large quantities are sprayed in a short period of time. Prevent eye and skin contact. Use protective equipment where possible, i.e. safety glasses and gloves. Use only as directed. Intentional misuse by deliberately concentrating and inhaling or swallowing may be harmful or fatal. Do not puncture or incinerate. Store at temperatures below 120F. Keep out of the reach of children.

ADDITIONAL EXPOSURE LIMITS

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH
	VALUE	UNIT		
acetone	1780	mg/m ³	TWA	ACGIH
acetone	1000	ppm	STEL	ACGIH
acetone	2375	mg/m ³	STEL	ACGIH
acetone	750	ppm	TWA	OSHA
acetone	1800	mg/m ³	TWA	OSHA
acetone	1000	ppm	STEL	OSHA
acetone	2400	mg/m ³	STEL	OSHA
propane	1800	mg/m ³	TWA	OSHA
ethyl alcohol	1900	mg/m ³	TWA	ACGIH
ethyl alcohol	1000	ppm	TWA	OSHA
ethyl alcohol	1900	mg/m ³	TWA	OSHA
2-ethoxyethyl alcohol	19	mg/m ³	TWA	ACGIH
2-ethoxyethyl alcohol	200	ppm	TWA	OSHA
2-ethoxyethyl alcohol	740	mg/m ³	TWA	OSHA
xylene	435	mg/m ³	TWA	ACGIH
xylene	150	ppm	STEL	ACGIH
xylene	655	mg/m ³	STEL	ACGIH
xylene	100	ppm	TWA	OSHA
xylene	435	mg/m ³	TWA	OSHA
xylene	150	ppm	STEL	OSHA
xylene	655	mg/m ³	STEL	OSHA
toluene	375	mg/m ³	TWA	ACGIH
toluene	150	ppm	STEL	ACGIH
toluene	560	mg/m ³	STEL	ACGIH
toluene	100	ppm	TWA	OSHA
toluene	375	mg/m ³	TWA	OSHA
toluene	150	ppm	STEL	OSHA
toluene	560	mg/m ³	STEL	OSHA
n-butyl alcohol	50	ppm	CEIL	OSHA

Abbreviations: N/D - Not Determined N/A - Not Applicable

3M Center
St. Paul, Minnesota 55144-1000
612/733 1110

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET



MSDS: SHIPPING MATE (TM) Box Re-Nu Coating
MARCH 3, 1989

PAGE: 4 of 5

7. PRECAUTIONARY INFORMATION (continued)

ADDITIONAL EXPOSURE LIMITS

INGREDIENTS	EXPOSURE		LIMITS	
	VALUE	UNIT	TYPE	AUTH
n-butyl alcohol	150	mg/m3	CEIL	OSHA
n-butyl alcohol	150	mg/m3	CEIL	ACGIH
isopropyl alcohol	980	mg/m3	TWA	ACGIH
isopropyl alcohol	500	ppm	STEL	ACGIH
isopropyl alcohol	1225	mg/m3	STEL	ACGIH
isopropyl alcohol	400	ppm	TWA	OSHA
isopropyl alcohol	980	mg/m3	TWA	OSHA
isopropyl alcohol	500	ppm	STEL	OSHA
isopropyl alcohol	1225	mg/m3	STEL	OSHA
n-butyl acetate	150	ppm	TWA	OSHA
n-butyl acetate	710	mg/m3	TWA	OSHA
n-butyl acetate	200	ppm	STEL	OSHA
n-butyl acetate	950	mg/m3	STEL	OSHA
n-butyl acetate	710	mg/m3	TWA	ACGIH
n-butyl acetate	200	ppm	STEL	ACGIH
n-butyl acetate	950	mg/m3	STEL	ACGIH
methanol	260	mg/m3	TWA	ACGIH
methanol	250	ppm	STEL	ACGIH
methanol	310	mg/m3	STEL	ACGIH
methanol	200	ppm	TWA	OSHA
methanol	260	mg/m3	TWA	OSHA
methanol	250	ppm	STEL	OSHA
methanol	310	mg/m3	STEL	OSHA
bis-2-ethylhexyl phthalate	10	mg/m3	STEL	ACGIH
bis-2-ethylhexyl phthalate	5	mg/m3	TWA	OSHA
bis-2-ethylhexyl phthalate	10	mg/m3	STEL	OSHA

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration

8. HEALTH HAZARD DATA

EYE CONTACT: Liquid may be irritating to eyes upon direct contact.
Vapors may be irritating to the eyes.

SKIN CONTACT: Prolonged and repeated skin contact may defat skin
leading to irritation and dermatitis.

INHALATION: Exposure to vapor concentrations in excess of
recommended exposure limits may cause respiratory system irritation
and temporary nervous system impairment. Symptoms of overexposure
may range from mild light headedness through weakness, dizziness,
headache, nausea and facial numbness. Gross overexposure such as is
caused by intentional inhalation of concentrated vapors in a confined
vessel can result in serious damage including asphyxiation and death.

INGESTION: No an anticipated route of exposure due to the aerosol

Abbreviations: N/D - Not Determined N/A - Not Applicable

3M Center
St. Paul, Minnesota 55144-1000
612/733 1110

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET

MSDS: SHIPPING MATE (TM) Box Re-Nu Coating
MARCH 3, 1989

PAGE: 5 of 5

8. HEALTH HAZARD DATA

(continued)

nature of the product. Intentional concentration and swallowing the liquid product may cause severe digestive system irritation, nausea and vomiting. Asphyxiation into the lungs caused by vomiting can cause lung damage.

NOTE: bis(-2-ethylhexyl) phthalate has been shown to be a potential cancer hazard based on animal studies. Repeated ingestion causes testicular atrophy and liver changes in laboratory animals. Exceedingly high doses produce birth defects in mice. However, because of definite metabolic differences between rodents and humans, the carcinogenic risk to humans is low or non-existent.

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
INGREDIENTS	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
PHYSICAL DATA	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
FIRE & EXP. DATA	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
ENVIRON. DATA	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
FIRST AID	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
PRECAUT. INFO.	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE
HEALTH HAZD. DATA	SECTION CHANGED SINCE	JUNE 30, 1987	ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.